



**Senior Portfolio
of
Ina Budina
B.S. in Information Technology
11/15/2021**

Table of Contents

Transmittal Letter	3
Executive Summary	4
Personal Statement	5
Resume	6
Senior Activities	8
Soft Skills	17
Extra-Curricular Activities	19
Certificates and Awards	33
Career Plan	34

Transmittal Letter

November 16, 2021

Dr. Diane Murphy

Department Chair IT, Data Science and Cybersecurity

Marymount University, Arlington, VA

Dear Dr. Murphy,

Please find my senior portfolio which provides evidence of my information technology and skills, as well as other transferable skills. In my portfolio, I have integrated the most important projects/papers that I have prepared during my time at Marymount university. I believe that this document showcases my set of skills to future employers to become an IT expert leading technological development, digitalization, business development, innovation, and entrepreneurship. This document is my reflection as a person and will give you an idea of my work potential, career-drive, strengths based on my experiences and involvement in various activities.

The portfolio also includes my resume, focusing on my major skills, experiences, courses and activities while in Marymount university, as well as extracurricular activities and studies abroad. The portfolio also includes pictures to document key activities, codes in python, SQL, an AWS project in cloud computing, data analytics team project, providing evidence for teamwork, and my capstone project, including the capstone proposal and evidence for project management, the main report and presentation, to serve as an evidence of my written and oral business communication skills.

Thank you for reading my senior portfolio document and looking forward to your comments and advice.

Sincerely,

Ina Budina

Email: Irb14343@marymount.edu

LinkedIn: [Ina Budina](#) | [LinkedIn](#)

Phone: (202) 758 9841

Executive Summary

Welcome to the senior portfolio of Ina Budina. The portfolio includes an executive summary, resume, and specific information providing evidence for Ina Budina's technology and other transferable skills, experience, course works, studies abroad, extracurricular activities, and career-plan. The senior portfolio is structured as follows.

The first section includes Ina Budina's personal statement that highlights key insights as to why she has chosen to pursue a career in information technology, while deepening her business experience and knowledge. Next, her resume summarizes her technology and transferable skills, experiences, education, study abroad and other key information about her. The senior activities section includes a summary of Ina's capstone projects, along with her plans for Spring 2022 internship and what she expects to gain from this experience.

The section on the specific fields of study includes specific information, weblinks, and evidence of activities in several IT fields, including programming code development, database technology, data analytics, software testing and documentation, and about her capstone project. The next section includes the soft skills that Ina Budina developed from her key extracurricular activities, including her global experiences, volunteer activities, and a seal of biliteracy in Bulgarian, mentioned and supported by direct evidence, including pictures along with a copy of the certificates and references names that can verify performance in these activities.

The final section of the senior portfolio focuses on Ina's career plan where she outlines her strategy to enroll in graduate studies after her graduation from Marymount University.

Personal Statement

My name is Ina Budina and I am a senior student at Marymount University and plan to graduate in May 2022 with a B.S. in Information technology, and minors in business analysis, in business administration, and in economics. I target jobs in the Information Technology field, including business analysis, cloud computing, cybersecurity, and overall IT project management. I am personable and diligent, with strong critical thinking, technology, and business communication skills. I have experience in python, web development, data technology and data analytics, cloud computing, and in writing reports and managing projects. I am also proficient in excel, word, and powerpoint.

I am passionate about creating technology that enhances user experience and helps companies grow, while also respecting the key ethical principles. Digitalization has fundamentally changed our lives in the last few decades and this trend exploded during COVID-19, when many economic activities moved to virtual space overnight. FinTech revolution, digitalization, AI, and interactive technologies are all facts today. For these processes to function, we need algorithms that leave the problem-solving process to a set of rules, implemented by a computer. At the same time, algorithms present important risks with potentially severe implications, such as spreading 'fake news', creating filter bubbles with biased information on social media apps, and can be exploited as a warfare tool for foreign interference in politics. Everything I have learned so far in my classes in information technology, business and economics will help build my interdisciplinary foundation of knowledge, necessary to develop my IT career to build a digital economy that works for the people.

Building on my multicultural perspective, I would like to ensure that technology is treating everyone in a fair way, and does not inherit social biases and social divisions like those present in our society today. I will build on and deeply cherish my experiences of connecting to the world and being comfortable with working with individuals from very different backgrounds, and always be mindful of the need to develop fair algorithms that do not bias important AI decisions against certain vulnerable groups of our society. Having multiple experiences with studying abroad, I enjoy working in multicultural teams from different backgrounds. For example, during my time at Marymount I had an opportunity to go on a study visit to Cuba, where I learned more about the challenges of the centrally-planned economies as part of my macroeconomics class at Marymount. I participated in summer programs at Oxford University, the United Kingdom, where I met with students from at least forty nationalities and learned about economics of poverty, and at the EU Business School of Barcelona, Spain, learning about business and entrepreneurship through practical experience, meeting business executives of start-ups and innovative companies. Finally, given my Bulgarian roots I have also spent a lot of time in Bulgaria, learning about the challenges and issues of people in Eastern Europe.

Resume

Ina-Eliza Budina

 202 758 9841  Irb14343@marymount.edu  [Ina Budina | LinkedIn](#)

Overview

Personable and diligent, with strong critical thinking, technology, and communication skills, pursuing B.S in IT and minoring in business analysis, business administration, and economics. Quick learner and able to leverage on skills and knowledge gained from courses, work, and volunteer experiences. Bilingual in English and Bulgarian language, Spanish (intermediate).

Skills

Technology: Cloud Computing, Cybersecurity, Database Technology, Data Analytics, Software Testing and Quality Assurance, Computer Networking, Computer Technology, Cyberethics

Programming and Scripting Language: Python, SQL, HTML, CSS

Other tech skills: Windows, Mac OS, GitHub, MS-Office, Hardware

Business skills: Project management, Business communications, Organizational Management.

Language skills: English (native), Seal of Biliteracy in Bulgarian, Spanish (intermediate)

Other: critical thinking, problem solving, responsibility, supervision, teamwork.

Education

B.S in Information Technology, Marymount University, Arlington, VA.

Anticipated Graduation: May 2022

Minors: Business Analysis, Business Administration, and Economics.

Course Work

IT: Cloud Computing, Computer Technology, Computer Networking, Cybersecurity, Cyberethics, Database Technology, Data Analytics, Managing Big Data, Software Engineering, Software Testing and Quality Assurance, Python, Web Development, Human Computer Interaction, Capstone Project

Business and Economics: The Business Experience, Project Management, Organizational Management, Business Communication, Business Law, Principles of Microeconomics, Macroeconomics, Business and Economics of Sports, Economic and Business History of the U.S., Money and Banking, Statistical Analysis.

Work and Volunteer Experience

Babysitter, Mrs. De La Follye De Joux & Mr. Wiest Washington D.C. Jan 2018 - June 2019

Worked for a family| Read books to kids and cooked meals for them | Supervised kids in the evenings, when parents were away

Volunteer, Bulgarian Embassy, Washington DC**May 2012 - May 2019**

Displayed Bulgarian traditions such as folk dancing during Embassy week | Strengthen Greater D.C. community | A dancer of the Bulgarian folk-dancing group “Zdravetz”

Summer Intern, World Bank, Washington D.C.**May 2018-****July 2018**

Research Natural Resources in Africa | Analyze macroeconomic data and data on natural resources for African countries | Drafted background paper on data and analytics on Natural Resources in Africa

Leadership**Camp Counselor, Jelleff Club, boys and girls camp, Washington D.C.****March - June 2016**

Used leadership skills, organizing and leading students to field trips | Used creativity skills to produce bulletin boards | Caretaker for the students at the club

Studies Abroad**Summer Program, Oxford University, Oxford, United Kingdom.****July 2019****Certificate in Economics: July 2019**

Participated in a summer program in economics at Oxford University | Participated in classes in economics of poverty | Earned a certificate in economics from Oxford University.

Study visit to Cuba, Principles of Macroeconomics, Marymount University**Spring 2019**

Went on a class study visit to Cuba, 2019, as part of the course on principles of macroeconomics | Learned about differences between centrally planned and market economies | Gained practical experience on the functioning of centrally planned economies, with widespread subsidies and parallel exchange rate.

Summer Program, EU Business School, Barcelona, Spain.**July 2018**

Participated in a summer program in Business and Entrepreneurship | Participated in classes and study visits to start-ups, innovative, and large companies to learn more about entrepreneurship | Earned a Certificate in Business and Entrepreneurship.

Other Activities

Earned a seal of biliteracy in Bulgarian, 2019 | Participated in the 2018 Hackathon for Women at Maryland University | Participated in a summer workshop on Economic growth, Bulgaria, 2017 |

Senior Activities

Capstone: I got interested to learn more about the risks and challenges of algorithms and AI and to define potential options for reforms that both public and private sector organizations could implement to minimize and mitigate these algorithmic risks.

As my Capstone project, I wrote about the challenges of digitalization and algorithms. While algorithms help us become more productive and find relevant information very quickly, we all have been witnessing the darker side of algorithms and Artificial Intelligence (AI). For instance, the potential of AI to quickly create and multiply fake news has significantly impacted any sphere of our society. Algorithms can be used for warfare, allowing for foreign interference in the election processes or creating social divisions, while security breaches harm the economy, and the society. Algorithms can also be based on wrong statistical models or even data.

Major challenges of algorithmic risks include increasing complexity, lack of transparency in algorithm designs, lack of standards and regulations, and weak governance. The algorithms are becoming increasingly complex, they are often proprietary, without a disclosure of the main code behind them, and in the context of the deep learning techniques, it seems impossible to understand what variables and data determine the decision-making process. Standards and regulations with respect to algorithms are lacking as well, which creates another complication. There is also a weak governance of algorithms, recently illustrated by the way algorithms have been used by Cambridge Analytica aiming to sway public opinion and the 2016 US elections, as highlighted in the documentary “The Great Hack”. Algorithmic risks include biases and errors in input data and inadequate sampling, flawed in the algorithmic design, and incorrect interpretation or inappropriate use of output.

Because of their use as a strategic decision making, algorithms may impose financial, regulatory, and strategic risks for many organizations if any errors and vulnerabilities in algorithms appear. Efficient management of algorithmic risks requires an innovative approach, combining strong risk management at the individual organization level, with regulatory reforms and adapting new leading practices. A successful algorithmic risk management requires setting risk management frameworks to evaluate potential issues with algorithmic deployment, evaluate the potential impact of algorithms risks, enhance senior management’s understanding of algorithmic risks, and set a governance structure to identify, assess, and manage potential algorithm risks.

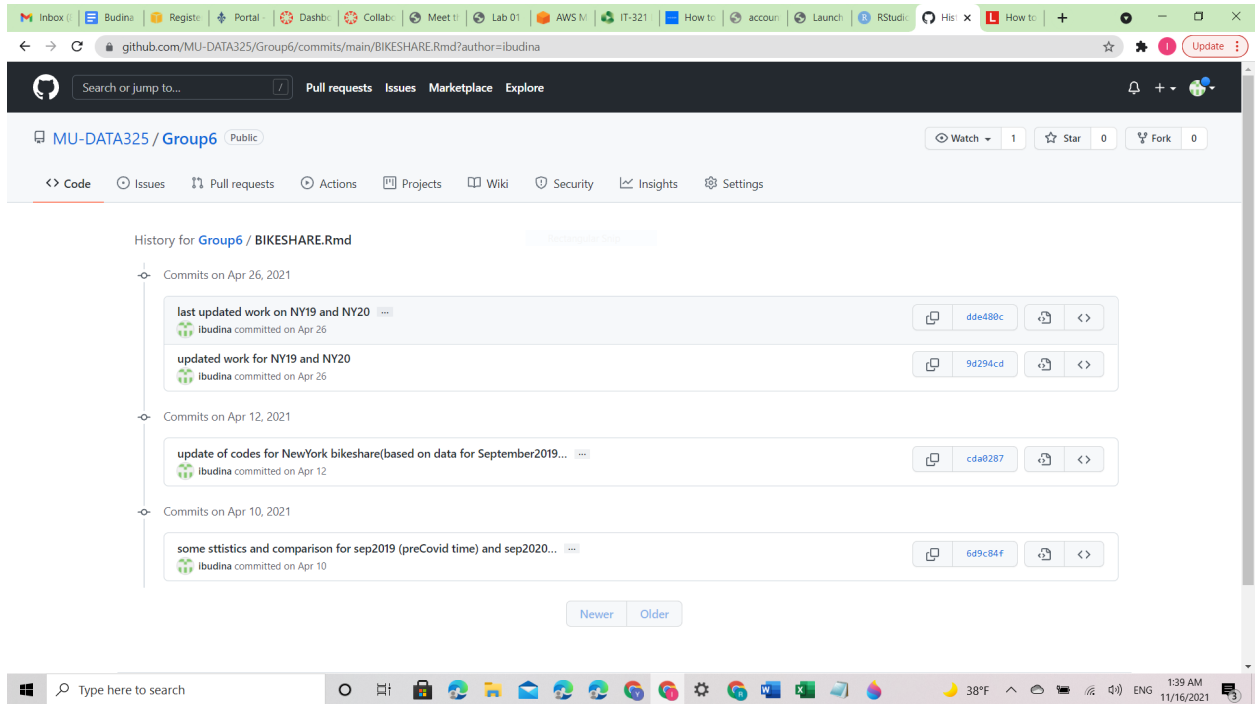
At the same time, the organizations are not alone in their efforts for managing algorithmic risks. Many researchers, regulators, lawmakers, and advocacy groups advocate for the need of reforms to improve risk management standards to match the increasing complexity in algorithmic use.

Specific Field of Study

As a student of B.S in Information technology, I am also minoring in business analysis, business administration and economics. I have taken courses like Cloud Computing, Computer Technology, Computer Networking, Cybersecurity, Cyberethics, Database Technology, Data Analytics, Managing Big Data, Software Engineering, Software Testing and Quality Assurance, Python, Web Development, Human Computer Interaction, Capstone Project. These classes helped me learn, gain hands-on experience with solving real world problems, broaden my knowledge in the IT field and stimulate my interest in gaining further experience. These classes combine nicely with the classes I took as part of my minors in business administration and economics. For example, having learned about the principles of microeconomics, business and innovation, organizational management, business law and business communications helps me understand that implementing and developing new technology, like software development, algorithms, web designs, and data analytics is usually not done in a vacuum but rather that all the technology development and implementation is done in various organizations and businesses. In this context, good incentives and organizational structure and the regulatory environment in which these organizations and businesses function are critical to support innovation, entrepreneurship, and innovation, deploying the new technologies. Thus, I will build on my interdisciplinary knowledge of IT, business and economics to develop a vision about the kind of technology, AI and algorithms that our society needs, greatly enhancing user experience, helping the companies to compete and grow, while also respecting the main ethical principles.

Documentation:

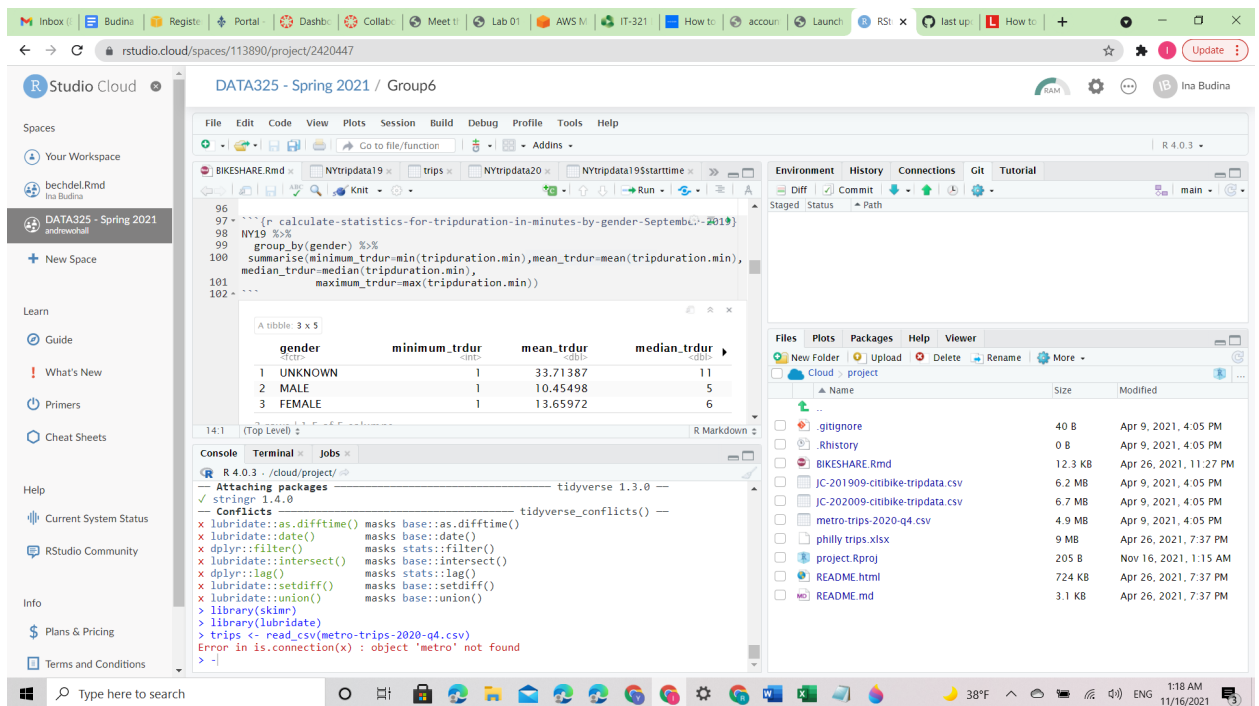
1. RStudio and Github: Please see below outputs of our team project on Bikeshare. Our group worked on Github and coded in R using R Studio. Using a database for bicycle usage in New York for 2019 and 2020 I have created new variables and compared the bike usage by different categories. First I calculated mean, median, minimum and maximum bike usage in different years. Then I used packages and functions to visualize the performance in different variables comparing and contrasting them. The members of our group also used my code to perform similar analysis for other big cities in the U.S. Full code can be seen [Here](#) .



History for **Group6** / BIKESHARE.Rmd

- Commits on Apr 26, 2021
 - last updated work on NY19 and NY20
ibudina committed on Apr 26
 - updated work for NY19 and NY20
ibudina committed on Apr 26
- Commits on Apr 12, 2021
 - update of codes for NewYork bikeshare(based on data for September2019...
ibudina committed on Apr 12
- Commits on Apr 10, 2021
 - some sttistics and comparison for sep2019 (preCovid time) and sep2020...
ibudina committed on Apr 10

Navigation: [Newer](#) [Older](#)



DATA325 - Spring 2021 / Group6

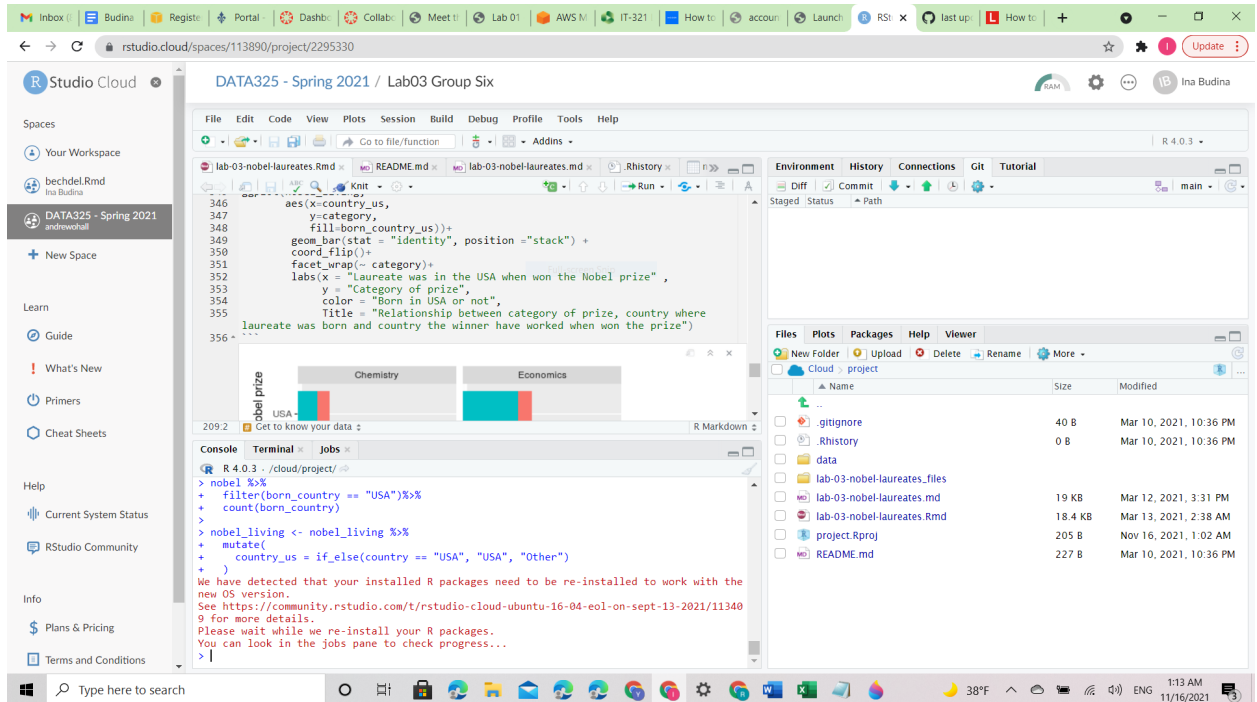
Environment: R 4.0.3

Files:

Name	Size	Modified
.gitignore	40 B	Apr 9, 2021, 4:05 PM
.Rhistory	0 B	Apr 9, 2021, 4:05 PM
BIKESHARE.Rmd	12.3 KB	Apr 26, 2021, 11:27 PM
JC-201909-citibike-tripdata.csv	6.2 MB	Apr 9, 2021, 4:05 PM
JC-202009-citibike-tripdata.csv	6.7 MB	Apr 9, 2021, 4:05 PM
metro-trips-2020-q4.csv	4.9 MB	Apr 9, 2021, 4:05 PM
philly-trips.xlsx	9 MB	Apr 26, 2021, 7:37 PM
project.Rproj	205 B	Nov 16, 2021, 1:15 AM
README.html	724 KB	Apr 26, 2021, 7:37 PM
README.md	3.1 KB	Apr 26, 2021, 7:37 PM

Console:

```
R 4.0.3 - /cloud/project/
Attaching packages
stringr 1.4.0
tidyverse 1.3.0
Conflicts:
  tidyverse_conflicts()
x lubridate::as_datetime() masks base::as_datetime()
x lubridate::date() masks base::date()
x dplyr::filter() masks stats::filter()
x lubridate::intersect() masks base::intersect()
x dplyr::lag() masks stats::lag()
x lubridate::setdiff() masks base::setdiff()
x lubridate::union() masks base::union()
> library(skimr)
> library(lubridate)
> trips <- read_csv(metro-trips-2020-q4.csv)
Error in is.connection(x) : object 'metro' not found
> |
```



2. Cloud Computing: I use Amazon Web Services platform to practice what I have learned in my Cloud Computing classes. This is a very valuable experience, where I can test in a real life environment how to set up and deploy services in the cloud. Lab projects helped me understand the process and steps in migrating some of the companies information technology services to the cloud environment. Some examples are launching instances, storage, setting up an auto scaling group and using different criterias for scaling in and scaling out. Those opportunities help companies save resources and cut costs while increasing reliability and security of their operations.

Topic: Correction to Lab 2 | Install Stress Utility on Ama... | IT-321 Lab 1 Walkthrough | IT-321 Lab 2 Walkthrough | Instances | EC2 Management | +

https://console.aws.amazon.com/ec2/v2/home?region=us-east-1#Instances:sort=descavailabilityZone

aws Services Search for services, features, marketplace products, and docs [Alt+S]

New EC2 Experience Tell us what you think

EC2 Dashboard EC2 Global View Events Tags Limits

Instances

Instances New

Instance Types Launch Templates Spot Requests Savings Plans Reserved Instances New Dedicated Hosts Scheduled Instances Capacity Reservations

Instances (4/6) Info

Filter instances

Name	Instance ID	Instance state	Instance...	Status check	Alarm status	Availability Zo
<input checked="" type="checkbox"/>	i-0f64abd9c85beb3ea	Running	t2.micro	2/2 checks passed	No alarms	us-east-1d
<input type="checkbox"/>	Lab1	Running	t2.micro	2/2 checks passed	No alarms	us-east-1d
<input checked="" type="checkbox"/>	i-0483574a31553050e	Terminated	t2.micro	-	No alarms	us-east-1a
<input type="checkbox"/>	i-057ea316c465e8240	Running	t2.micro	2/2 checks passed	No alarms	us-east-1a

Instances: i-0f64abd9c85beb3ea, i-0483574a31553050e, i-0603b915e18c9e54a, i-02ce3b1555ffae7fc

Network in (bytes) Network out (bytes) Network packets in (co... Network packets out (c...

Bytes Bytes Count Count

i-0f64abd9c85beb3ea i-0483574a31553050e i-0f64abd9c85beb3ea i-0483574a31553050e

Feedback English (US)

© 2008 - 2021, Amazon Web Services, Inc. or its affiliates. All rights reserved. Privacy Policy Terms of Use Cookie preferences

Type here to search

Lab 1 Demo on Panopto | IT-321 Lab 1 Walkthrough | IT-321 Lab 2 Walkthrough | EC2 Management Console | +

https://console.aws.amazon.com/ec2autoscaling/home?region=us-east-1#/details

aws Services Search for services, features, marketplace products, and docs [Alt+S]

New EC2 Experience Tell us what you think

EC2 Dashboard New Events New Tags Limits

INSTANCES

Instances

Instance Types Launch Templates Spot Requests Savings Plans Reserved Instances Dedicated Hosts New Scheduled Instances Capacity Reservations

IMAGES

The old Auto Scaling groups console is no longer available. We will keep improving the new console based on your feedback.

EC2 > Auto Scaling groups

Auto Scaling groups (2)

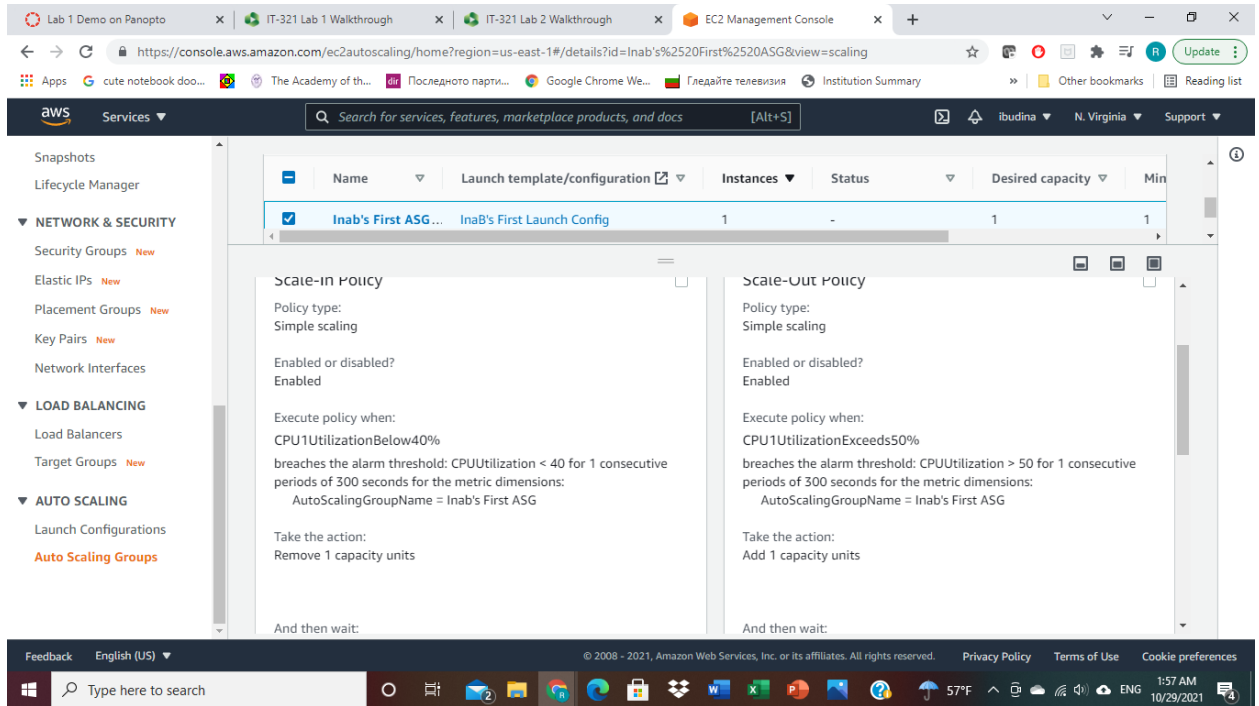
Search your Auto Scaling groups

Name	Launch template/configuration	Instances	Status	Desired capacity	Min
InaB's First ASG...	InaB's First Launch Config	1	-	1	1
Ina's First ASG	Ina's First Launch Config	1	-	1	1

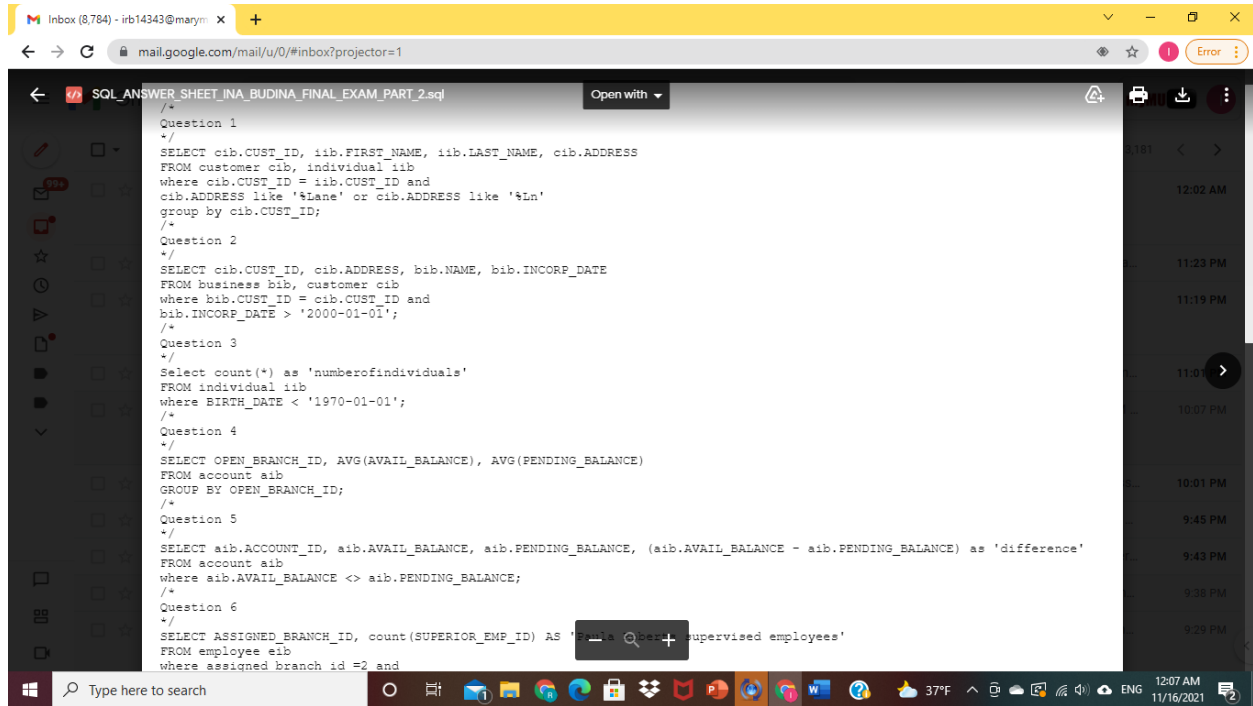
Feedback English (US)

© 2008 - 2021, Amazon Web Services, Inc. or its affiliates. All rights reserved. Privacy Policy Terms of Use Cookie preferences

Type here to search



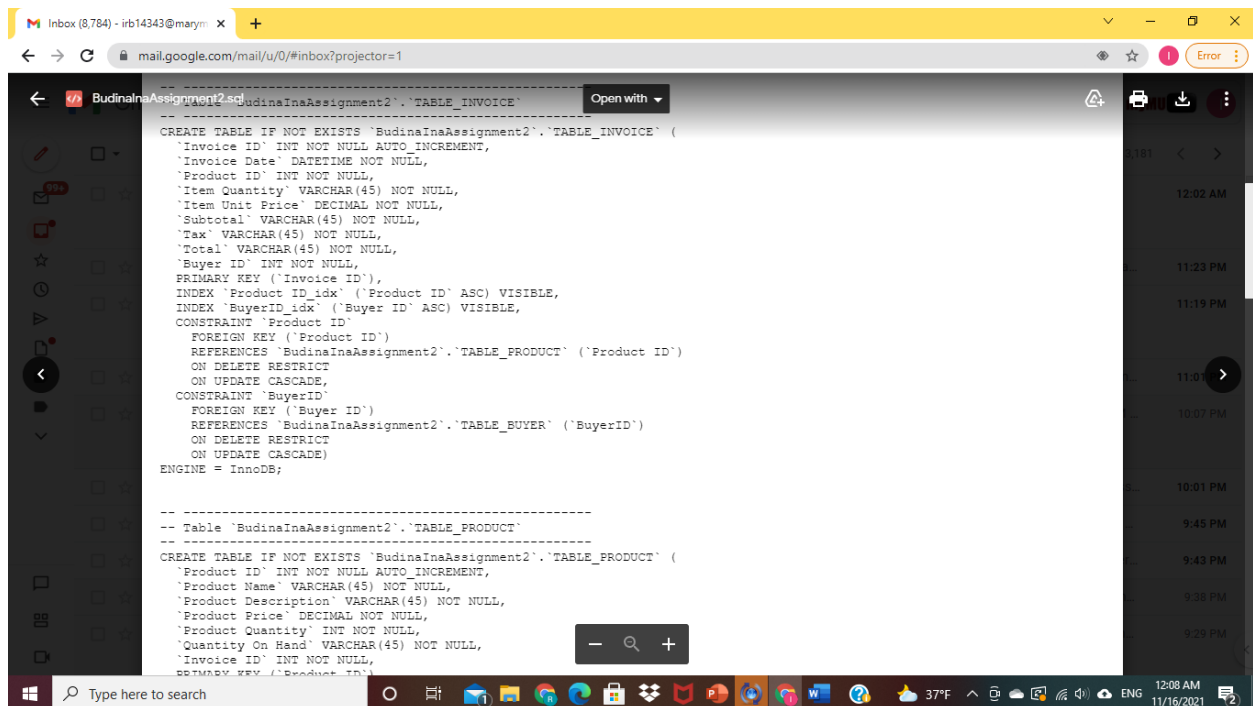
3. Database: I used MySQL for my database class and worked on several assignments using MySQL. I used a relationship database to create tables, read, summarize and extract various data and information from the tables.



SQL_ANSWER SHEET_INA_BUDINA_FINAL_EXAM_PART_2.sql

```

/*
Question 1
*/
SELECT cib.CUST_ID, iib.FIRST_NAME, iib.LAST_NAME, cib.ADDRESS
FROM customer cib, individual iib
where cib.CUST_ID = iib.CUST_ID and
cib.ADDRESS like '%Lane' or cib.ADDRESS like '%Ln'
group by cib.CUST_ID;
/*
Question 2
*/
SELECT cib.CUST_ID, cib.ADDRESS, bib.NAME, bib. INCORP_DATE
FROM business bib, customer cib
where bib.CUST_ID = cib.CUST_ID and
bib. INCORP_DATE > '2000-01-01';
/*
Question 3
*/
Select count(*) as 'numberofindividuals'
FROM individual iib
where BIRTH_DATE < '1970-01-01';
/*
Question 4
*/
SELECT OPEN_BRANCH_ID, AVG(AVAIL_BALANCE), AVG(PENDING_BALANCE)
FROM account aib
GROUP BY OPEN_BRANCH_ID;
/*
Question 5
*/
SELECT aib.ACCOUNT_ID, aib.AVAIL_BALANCE, aib.PENDING_BALANCE, (aib.AVAIL_BALANCE - aib.PENDING_BALANCE) as 'difference'
FROM account aib
where aib.AVAIL_BALANCE <> aib.PENDING_BALANCE;
/*
Question 6
*/
SELECT ASSIGNED_BRANCH_ID, count(SUPERIOR_EMP_ID) AS 'Number of supervised employees'
FROM employee eib
where assigned branch id =2 and
  
```



BudinaInaAssignment2.sql

```

-----
Table 'BudinaInaAssignment2'.TABLE_INVOICE
-----
CREATE TABLE IF NOT EXISTS 'BudinaInaAssignment2'.TABLE_INVOICE' (
  'Invoice ID' INT NOT NULL AUTO_INCREMENT,
  'Invoice Date' DATETIME NOT NULL,
  'Product ID' INT NOT NULL,
  'Item Quantity' VARCHAR(45) NOT NULL,
  'Item Unit Price' DECIMAL NOT NULL,
  'Subtotal' VARCHAR(45) NOT NULL,
  'Tax' VARCHAR(45) NOT NULL,
  'Total' VARCHAR(45) NOT NULL,
  'Buyer ID' INT NOT NULL,
  PRIMARY KEY ('Invoice ID'),
  INDEX 'Product ID_idx' ('Product ID' ASC) VISIBLE,
  INDEX 'BuyerID_idx' ('Buyer ID' ASC) VISIBLE,
  CONSTRAINT 'Product ID'
    FOREIGN KEY ('Product ID')
      REFERENCES 'BudinaInaAssignment2'.TABLE_PRODUCT' ('Product ID')
      ON DELETE RESTRICT
      ON UPDATE CASCADE,
  CONSTRAINT 'BuyerID'
    FOREIGN KEY ('Buyer ID')
      REFERENCES 'BudinaInaAssignment2'.TABLE_BUYER' ('BuyerID')
      ON DELETE RESTRICT
      ON UPDATE CASCADE)
ENGINE = InnoDB;

-----
-- Table 'BudinaInaAssignment2'.TABLE_PRODUCT'
-----
CREATE TABLE IF NOT EXISTS 'BudinaInaAssignment2'.TABLE_PRODUCT' (
  'Product ID' INT NOT NULL AUTO_INCREMENT,
  'Product Name' VARCHAR(45) NOT NULL,
  'Product Description' VARCHAR(45) NOT NULL,
  'Product Price' DECIMAL NOT NULL,
  'Product Quantity' INT NOT NULL,
  'Quantity On Hand' VARCHAR(45) NOT NULL,
  'Invoice ID' INT NOT NULL,
  PRIMARY KEY ('Product ID')
  
```

4. Software Testing: As a final project, I tested the MUEngage page and documented my findings. I developed various test cases and ran a manual test on Marymount's webpage. [Here](#) is the report.

Inbox (8,784) - irb14343@marym... x +

mail.google.com/mail/u/0/#inbox?projector=1

W Ina_It_355_Project_Engage_IT355.docx

Open with Google Docs

Test Case Name	Speed testing
Test Case ID	0003
Type of Test	Performance Test
Test Scenario	<ol style="list-style-type: none"> 1. Launch the browser from the test device 2. Type the link for the MU portal in the browser address bar 3. Login into the MU portal using your valid MU credentials 4. Click the MU Engage link from the portals left sidebar 5. Monitor how quickly an application responds when task executed
Test Data	my.marymount.edu jsmith2020@marymount.edu pswdsucces
Expected Result	an application load under a minute, so consider normal speed or poor response time if more than a minute
Entry Criteria	<ul style="list-style-type: none"> - Devices for testing are installed with the latest web browsers - the test automation scripts are ready - the devices have network and internet access, and network credentials are provided

TEST CASE #4

Test Case Name	Load Testing
Test Case ID	0004
Type of Test	Performance Test

Page 7 / 13

Type here to search

37°F

12:08 AM 11/16/2021

Inbox (8,784) - irb14343@marym... x +

mail.google.com/mail/u/0/#inbox?projector=1

W Ina_It_355_Project_Engage_IT355.docx

Open with Google Docs

TEST CASE #6	
Test Case Name	Security
Test Case ID	0006
Type of Test	Security Test
Test Scenario	<ol style="list-style-type: none"> 1. Launch the browser from the test device 2. Type the link for the MU portal in the browser address bar 3. Login into the MU portal using your valid MU credentials 4. Click the MU Engage link from the portals left sidebar
Test Data	my.marymount.edu jsmith2020@marymount.edu pswdsucces vulnerability scanning, security scanning, penetration testing, ethical hacking
Expected Result	the website is completely secure on the devices, as well as the devices themselves.
Entry Criteria	<ul style="list-style-type: none"> - Devices for testing are installed with the latest web browsers - the test automation scripts are ready - the devices have network and internet access, and network credentials are provided

TEST CASE #7

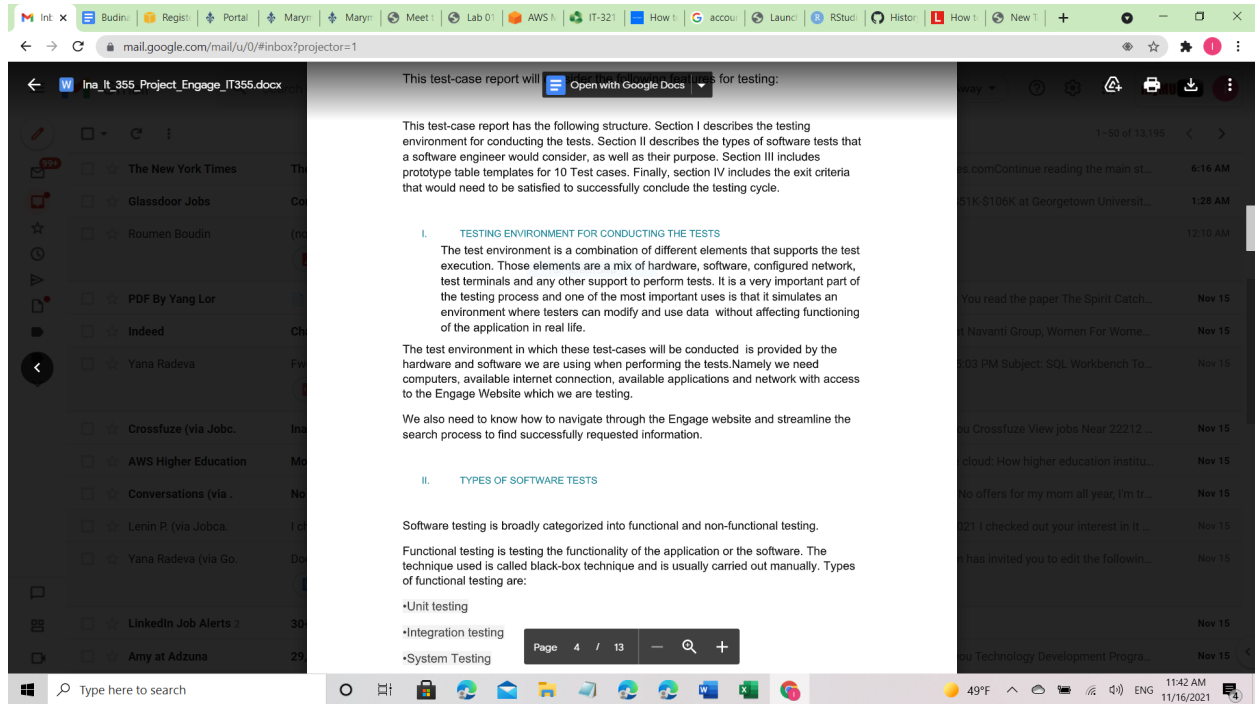
Test Case Name	Load Testing
Test Case ID	0007
Type of Test	Performance Test

Page 9 / 13

Type here to search

37°F

12:09 AM 11/16/2021



The screenshot shows a web browser window with multiple tabs. The active tab is a Google Mail inbox. The left sidebar shows a list of emails, including 'The New York Times', 'Glassdoor Jobs', 'Roumen Boudin', 'PDF By Yang Lor', 'Indeed', 'Yana Radeva', 'Crossfuzze (via Jobe...', 'AWS Higher Education', 'Conversations (via...', 'Lenin P. (via Jobca...', 'Yana Radeva (via Go...', 'LinkedIn Job Alerts', and 'Amy at Adzuna'. The main content area displays an email titled 'This test-case report will be used for testing:'. The email body contains the following text:

This test-case report has the following structure. Section I describes the testing environment for conducting the tests. Section II describes the types of software tests that a software engineer would consider, as well as their purpose. Section III includes prototype table templates for 10 Test cases. Finally, section IV includes the exit criteria that would need to be satisfied to successfully conclude the testing cycle.

I. TESTING ENVIRONMENT FOR CONDUCTING THE TESTS

The test environment is a combination of different elements that supports the test execution. Those elements are a mix of hardware, software, configured network, test terminals and any other support to perform tests. It is a very important part of the testing process and one of the most important uses is that it simulates an environment where testers can modify and use data without affecting functioning of the application in real life.

The test environment in which these test-cases will be conducted is provided by the hardware and software we are using when performing the tests. Namely we need computers, available internet connection, available applications and network with access to the Engage Website which we are testing.

We also need to know how to navigate through the Engage website and streamline the search process to find successfully requested information.

II. TYPES OF SOFTWARE TESTS

Software testing is broadly categorized into functional and non-functional testing. Functional testing is testing the functionality of the application or the software. The technique used is called black-box technique and is usually carried out manually. Types of functional testing are:

- Unit testing
- Integration testing
- System Testing

The right sidebar shows a list of emails, including 'Continue reading the main st...', '\$1K-\$106K at Georgetown Universit...', 'You read the paper The Spirit Catch...', 'Navanti Group, Women For Wome...', '03 PM Subject: SQL Workbench To...', 'Crossfuzze View Jobs Near 22212...', 'cloud: How higher education institu...', 'No offers for my mom all year, I'm tr...', '21 I checked out your interest in R...', 'has invited you to edit the followin...', and 'via Technology Development Progra...'. The bottom of the browser shows the Windows taskbar with the search bar, taskbar icons, and system tray.

Soft Skills

The following are some of my soft skills, which I believe are equally important for success in personal life and professional career:

1. Personable and diligent
2. Critical thinking
3. Committed team-player
4. Adaptability
5. Eager to learn
6. Self-disciplined
7. Multicultural (ability to understand different culture)
8. Communicative

Today we witness a clear trend of globalization of the world and a more open global economy. This requires collaboration between many countries, business partners and international companies. It is impossible to work alone. To that nature I think it is extremely important to be able to work in teams and be a committed team player. However, this has many more aspects in the fast changing environment and especially rapidly changing new technology. Quick changes required quick responses which translates to adaptability. Successful people in their personal life and successful businesses are those who are able to adapt faster to new environments. Another aspect of a global open economy is working across borders with different countries, people and cultures. Given my multicultural perspective, speaking few languages and experiencing extensive travelling I have managed to successfully communicate with people in different countries, where I have travelled to. In addition, participating in a few summer programs in different countries proves my adaptability and ability to understand and respect different cultures. Being able to study and work in different countries, teams and international groups made me practice and develop my team player skills further along with challenging my critical thinking and self discipline. In summary, I find as a very useful experience my participation in several summer schools, travelling and study abroad. Those programs and events provide me with the opportunities for my personal growth, quick learning, practicing new skills and professional development. As a result, this has helped me to boost my self-confidence, self-motivation and improve my communication skills.

Extra-Curricular Activities: Studies Abroad

For many years I have been actively involved in many cultural and educational activities in Bulgarian Cultural and Educational Center in the Washington D.C. area. As a graduate from Bulgarian school I have earned a Seal of Biliteracy, and I regularly help to organize and attend many cultural events in the area. Also as an active member of Bulgarian folk dance group Zdravetz I have participated and performed in numerous festivals and events, supporting and preserving folk and national music traditions and popularising Bulgarian culture.

Since Covid pandemic evolved I witnessed so much devastation due to lack of understanding the importance of vaccination. Life has changed globally and influenced every aspect of our society. I have decided to make a difference with my involvement in helping save human lives. I become an enthusiastic supporter of vaccination and personally participate actively to help people understand the importance of strictly following scientifically proven health measures and vaccination. Especially last summer in Bulgaria I was patiently involved in convincing, educating and helping people to get vaccinated, since there are many people resisting to follow those rules. Some did, but some did not. However, I still feel this as a part of my duty to be an ambassador for human health.

Outside of the school I also have taken an active volunteer role to support equal rights of women in our society and admire that more women are joining the field of Information Technology. In 2018 I participated in the Hackathon for Women at Maryland University. I have enrolled and support the Association for Computing Machinery's Council on Women MU Chapter.

In addition to my Marymount classes I have taken other opportunities to boost my personal growth and professional development. First, in 2017 I attended a summer seminar in economic growth in Bulgaria. Second, in 2018 I participated in the Summer Program of EU Business School in Barcelona, Spain where I earned a certificate for successfully completing their summer program. Next, in the summer of 2019 I was part of the Summer School in economics in Oxford University, UK, where I explored my knowledge of economics of poverty and earned a certificate.

During my Spring semester of 2019 and as a part of my macroeconomic course in Marymount I traveled for class study to Cuba, where we learned about and witnessed differences between centrally planned economy and market economies.

All those international experiences helped me to strengthen my business and economic knowledge and further develop a better perspective of the global market and economy.

In addition to my participation in the above mentioned summer classes and extracurricular activities I am patiently pursuing my hobbies like Bulgarian folk dancing, painting, cooking and travelling. As an extension to my Marymount painting class I have created my art portfolio, which I am constantly updating. Art imagination, exploring different

compositions, techniques and colors helps me to better understand, create and use modern technology, its vision and design.

Documentation:



Summer Program in Economics, Oxford University, United Kingdom, July 2019. Earned a Certificate in Economics from Oxford University.



Summer program in business and entrepreneurship, EU Business School, Barcelona, July 2018. Earned a certificate in business and entrepreneurship from the EU Business School.



Participated in the 2018 Hackathon for Women at the University of Maryland.



I graduated from the Bulgarian Educational and Cultural Center “Kliment Ohridski” and earned a Seal of Biliteracy in Bulgarian.



Bulgarian Folk Dance team "Zdravetz": Award Ceremony



Pictured Activities:

1. Participated in the 2019 Summer Program in Economics and earned a Certificate from Oxford University, United Kingdom, July 2019.
2. Participated in the 2018 Summer Program in Business and Entrepreneurship, earned a Certificate from the EU Business School, Barcelona, July 2018.
3. Participated in the 2018 Hackathon for Women at the University of Maryland.
4. Graduation day from the Bulgarian Educational and Cultural Center “Kliment Ohridski”; Earned a Diploma and a Seal of Biliteracy in Bulgarian.
5. Performed a traditional Bulgarian folk dancing as part of our folk dancing team “Zdravetz”. Pictured award ceremony of our team.
6. Painting in my painting home studio for my fine art class at Marymount University.

[Brian Hollar on Twitter: "What do you do when one of your incoming freshman students wants to meet with you after you've left the country for the summer? You meet her in Sofia, Bulgaria instead! @marymountu https://t.co/1BW4WccHIt" / Twitter](https://twitter.com/marymountu/status/1174444444444444444)















Certificates and Awards

Since 2018, my freshman year at Marymount University, I have earned several certificates:

1. Certificate for successfully completing EU Business School summer program in Business and Entrepreneurship, Barcelona, Spain. - Summer of 2018
2. Certificate from Oxford University summer program in economics for completing summer course in economics of poverty - Summer of 2019
3. Seal of Biliteracy in Bulgarian Language for successfully passing the internationally recognised exam in written and spoken language - June 2019
4. Certificate of graduation from Bulgarian School as a part of Bulgarian Cultural and Educational Center in Washington DC
5. Several Awards from Bulgarian folk dance group Zdravetz for performances, long-time commitment and active member of the group
6. Certificate of participation in Hackathon for women at Maryland University

Career Plan

I plan to do my IT490 (IT internship) in the Spring of 2022, my final semester. The objective is to get hands-on experience either in general IT field, cybersecurity, computer technology or networking, software engineering or software testing and quality control, or in cloud computing. I also plan to participate in Marymount Domestic Study Away: IT 389 Field Experience: Silicon Valley, where I can learn from leaders and practitioners working in leading companies in the Information Technology field. I hope to gain many insights from their meetings and presentations, which will help me to better understand, envision and focus on my future career. After graduation, I plan to look for another internship in the summer of 2022 and join a graduate school to work towards a master's degree and maybe even a doctorate degree. Because information technology is critical for every sphere of society, I plan to enroll in grad school to further deepen my knowledge in IT fields, while at the same time, deepen my knowledge in business, entrepreneurship, and innovation. In the summer, I also plan to attend programming courses at the University of Engineering in Sofia, Bulgaria, where my uncle is the head of the Math Department. I will use every minute from my precious time to prepare myself, stay positive, expand my network, make use of opportunities that the future will bring me to support my personal and professional growth and career opportunities.